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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/405,901	09/24/1999	CHARLES WECKEL	18561-051	1026

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EXAMINER	
AN, SHAWN S	
ART UNIT	**PAPER NUMBER**
2613	

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/405,901	WECKEL ET AL.	
	Examiner	Art Unit	
	Shawn S. An	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 January 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22 and 24-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,5,6,8-13,16,17,19-22 and 24-33* is/are rejected.

7)☒ Claim(s) *3,4,7,14,15 and 18* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Remarks

1. Applicant's election with traverse corresponding to claims 1-22 and 24 as filed on 1/31/05 has been acknowledged.

The Examiner is further persuaded by the Applicant's traversal.

Therefore, all of the pending claims 1-22 and 24-33 will be examined accordingly.

However, based on the Applicant's traversal, the Examiner may use a prior art reference comprising a local decoder to reject decoding claims 25-33.

Response to Amendment

2. As per Applicant's instructions as filed on 2/26/04, claims 1-5, 7-16, 18-22, 24-26 have been amended, claim 23 has been canceled, and claims 27-33 have been newly added.

As per Applicant's argument regarding **completeness of the office action**, since Examiner addressed all of the claims and further provided support on this office action, without changing the previously cited prior art reference, and since Applicant's amendment clearly necessitated the new ground(s) of rejection presented in this Office action, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Therefore, Applicant's argument regarding completeness of the office action is deemed moot.

Furthermore, all of the Applicant's arguments on this amendment are addressed and discussed below in view of new grounds) of rejection incorporating the previously cited prior art reference.

Response to Remarks

3. Applicants' arguments with respect to amended claims 1-5, 7-16, 18-22, and 24-26 have been carefully considered but are moot in view of the new ground(s) of rejection incorporating the previously cited prior art reference.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claims 5-6 and 16-17** recite the limitation "said sequences" in line 2. There is insufficient antecedent basis for this limitation in the claim. Furthermore, the Examiner notes claims 5 and 16 limitations as a whole are somewhat indefinite in that it fails to point out what exactly is included or excluded by the claim language. The Examiner requests more clear explanation/definition including a support from the specification regarding claims 5 and 16 limitations as discussed above from the Applicant.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 8-9, 12, 19-20, 24-26, and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohki (5,719,628).

Regarding claims 1, 9, 12, 20, 24-26, and 33, Ohki discloses an apparatus /method/storage for encoding/decoding pictures of video, comprising:

a decoder for decoding a plurality of coding units from a video signal, the coding units being partitioned among a plurality of groups in the picture according to a pattern, wherein the groups comprise a plurality of sequences, each of sequences comprises at least one of the coding units, wherein a first of groups uses a first type of prediction and a second of groups uses a second type of prediction different than the first type of prediction (col. 1, lines 13-33);

a motion compensator for adding coding units from the second group to a plurality of predictions derived from at least one of a plurality of reference picture for a motion compensation (col. 6, lines 33-37),

a frame memory for storing a new reference pictures formed from the coding units after the motion compensation (col. 6, lines 20-32);

a storage medium for supplying K > 1 pictures of video, each divided into an m > 1 row x by an n > 1 column array of coding units (Fig. 2, 200), and

an inter/intra decision circuit for selecting a pseudo random pattern of coding units for refreshing during each of the K pictures, each of the pseudo random pattern selected during any given one of the K pictures including a sequence of one or more the coding units, and pseudo random patterns are decorrelated among the K pictures (col. 4, lines 1-8),

wherein i) each of the coding unit selected for refreshing during a Kth picture of the K pictures occupy different positions than each of the coding units selected for refreshing during a preceding one of a 1st to a (K-1) th pictures of K pictures, and ii) each of the positions from the K pictures is selected for refreshing once over the K pictures (abs.).

Regarding claims 8 and 19, Ohki discloses each coding unit being interlaced field coding unit, wherein the interlaced field coding units from a single given frame of the interlaced frames are refreshed during sequential pictures of the K pictures (abs.).

8. Claims 2, 10-11, 13, 21-22, and 27-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohki (5,719,628).

Regarding claims 2, 13, 28, and 31, Ohki discloses coding units as lines having lines positions (Fig. 1). Note: during a video signal encoding process, typically a picture/frame is broken into lines, which are broken into slices, which are broken into macroblocks, before being encoded/coded.

Therefore, it would have been quite obvious to a one of skill in the art to realize coding units as macroblocks as well as positions being macroblock positions, which is more of conventional way of encoding video signals.

Regarding claims 10 and 21, since Ohki discloses a starting and an ending coding units of the coding units in each of the plurality of the sequences within each of the K pictures being located in different lines of the array over successive ones of the K pictures (Fig. 1), it is considered an obvious design feature, wherein, a starting and an ending coding units of the coding units in each of the plurality of the sequences within each of the K pictures are located in different columns of the array over successive ones of the K pictures as long as the outcome is substantially the same.

Regarding claim 11 and 22, since Ohki discloses that portions of lines in each respective field are designated for forced refreshing (abs.), it is considered an obvious design feature to start the coding unit position which is offset from a leftmost position in a first row of the array containing a beginning of the first sequence by one or more of the positions, and a second one of the sequences end at a second position which is offset from the rightmost position of a second row of the array containing an end of the second sequence by one or more positions, since most of the computations and/or readings are done from starting of a leftmost position and to an ending at a second position which could easily be offset from a rightmost position.

Regarding claims 27 and 30, since Ohki discloses coding video signals comprising fine patterns, it would have been quite obvious to a one of skill in the art to realize identifying the pattern by a unique number. Furthermore, it is well known to index or classify items, and/or objects by a designated number for an identification purpose.

Regarding claims 29 and 32, since Ohki discloses a refreshing technique, wherein some scanning lines are subjected to intra-field coding (col. 1, lines 43-53), it would have been quite obvious to a one of skill in the art to realize each of plurality of positions for the coding units being refreshed only once using intra-prediction as an extra measure to improve coding efficiency.

Allowable Subject Matter

9. Claims (3-4, 7) and (14-15, 18) are objected to as being dependent upon a rejected base claims 1 and 12, respectively, but would be allowable: if either one of claim 3 or claim 4 is rewritten in independent form including all of the limitations of the base claim 1 and any intervening claims; and if either one of claim 14 or claim 15 is rewritten in independent form including all of the limitations of the base claim 12 and any intervening claims.

Dependent claims 3-4, 7, 14-15, and 18 recite novel features, wherein the art of records fail to anticipate or make obvious the novel features.

Accordingly, if the amendments are made to the claims listed above, and if rejected claims are canceled, the application would be placed in a condition for allowance.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to *Shawn S An* whose telephone number is 571-272-7324.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

13. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

SHAWN AN
PRIMARY EXAMINER
6/12/05